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**Process For Adjusting Variations Of The Ink Quantity  
Transferred Onto The Print Image In The Printing Process**

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**Patent Claims**

15 1. Process for adjusting the print image of a rotation printing machine,  
- comprising ink transfer rollers (F, K) and actuators assigned to them,  
- with which it is possible to change the position of the rollers (F, K), and in  
which  
▪ at least one sensor – for instance, a camera – records the intensity of light  
20 experiencing an interaction with the printed material and  
▪ that the recorded measured values are fed to a control and regulation unit,  
▪ that compares the recorded measured values with set values and  
▪ that generates corrective signals for the actuator of at least one part of the  
rollers involved in the printing process  
25 ▪ based on which the actuator changes the relative position (x) of the roller  
assigned to it until the measured values once again lie within a tolerance  
range  
**characterized in that**  
30 ▪ during the printing process at least one sensor records measurements of the  
intensity of light experiencing an interaction with the printed material,

- during the printing operation the measured values are assigned to the ink transferred in at least one inking unit,
- during the printing operation the control and regulation unit generates corrective signals for the actuator of at least one part of the rollers (F, K) of the respective inking unit involved in the printing process,
- so that the variations in the ink quantity transferred onto a unit of area of the print image remain within a set range.

5 2. Process according to claim 1

10 **characterized in that**

in case of changes in the printing speed (v), the control and regulation unit generates additional corrective signals based on which the actuators adjust the roller positions in relation to the printing speed (v).

15 3. Process according to claim 2,

**characterized in that**

in case of changes in the printing speed (v), the control and regulation unit generates additional corrective signals based on calibration tables or algorithms that are stored in a storage device.

20 4. Process according to one of the afore-mentioned claims,

**characterized in that**

the sensor records the intensity of light that is penetrated previously by the printed material.

25 5. Process according to claim 4,

**characterized in that**

at least one light source supplies light to the side of the printed material that is opposite to the sensor.

## 6. Rotation printing machine with the following features:

- ink transfer rollers (F, K) and actuators assigned to them,
- wherein it is possible, with at least one actuator, to change the relative position (x) of the roller assigned to it based on corrective signals of the control and regulation unit,
- at least one sensor – for instance, a camera – for recording the intensity of light experiencing an interaction with the printed material,
- a control and regulating unit comprising means to compare the recorded measured values with set values and with which it is possible to generate corrective signals for the actuator of at least one part of the rollers (F, K) involved in the printing process,

**characterized in that**

- the control and regulating unit is provided with a program using which the measured values during the printing operation are assigned to the ink transferred in the inking unit and
- that it is possible, with the control and regulation unit to generate corrective signals during the printing operation for the actuator of at least one part of the rollers of the respective inking unit involved in the printing process.

## 20 7. Device according to claim 6

**characterized in that,**

at least one sensor with which it is possible to measure the light intensity in different spectral ranges.